What is claimed is:

1. A tool insert comprising:

a abrasive layer having a periphery forming a cutting surface wherein said continuous abrasive layer comprises at least one of polycrystalline diamond or cubic boron nitride; and

a substrate, said abrasive layer being located on said substrate,

wherein said abrasive layer tool insert has a sum value of an impact resistance number and an abrasion resistance number $\geq$ 19,000, wherein the impact resistance number is equal to a total number of hits before failure of the tool insert and the abrasion resistance number is equal to equation (1)

(1) $$\text{abrasion resistance} = \frac{\text{final volume of granite removed by the tool insert (inch}^3\text{)}}{\text{final tool wear land area (inch}^2\text{)}}.$$

2. The tool insert of claim 1, wherein said abrasive layer is sintered with a high pressure high temperature process.

3. The tool insert of claim 1, wherein said abrasive layer is formed from a bimodal powder mixture having at least one of the polycrystalline diamond or cubic boron nitride.

4. The tool insert of claim 3, wherein the bimodal powder mixture comprises fine particles of a substantially uniform size and coarse particles of a substantially uniform size, said coarse particles having a different substantially uniform size than the substantially uniform size of the fine particles.

5. The tool insert of claim 4, wherein an average size ratio of fine particles over coarse particles is between about 0.02 and about 0.75.

6. The tool insert of claim 4, wherein an average size ratio of fine particles over coarse particles is between about 0.05 and about 0.5.

7. The tool insert of claim 4, wherein an average size ratio of fine particles over coarse particles is between about 0.1 and about 0.5.

8. The tool insert of claim 4, wherein a standard deviation of particle size distribution of fine particles and coarse particles is smaller than about 0.6d, where d is an average particle size.

9. The tool insert of claim 4, wherein abrasive crystals of said abrasive layer have an average aspect ratio of particles of greater than about 0.3.

10. The tool insert of claim 4, wherein abrasive crystals of said abrasive layer have an average aspect ratio of particles of greater than about 0.4.

11. The tool insert of claim 4, wherein abrasive crystals of said abrasive layer have an average aspect ratio of particles of greater than about 0.5.

12. The tool insert of claim 4, wherein a volume fraction of fine particles is between about 5% to 90%, and a volume fraction of coarse particles is between about 10% to about 95%.

13. The tool insert of claim 4, wherein a volume fraction of fine particles is between about 10% to 80%, and a volume fraction of coarse particles is between about 20% and about 90%.

14. The tool insert of claim 4, wherein a volume fraction of fine particles is between about 15% to 70%, and a volume fraction of coarse particles is between about 30% and about 85%.

15. The tool insert of claim 3, wherein said abrasive layer has at least about 93 vol.% of diamond.

16. A method for manufacturing a tool insert component comprising:

forming an abrasive layer with a bimodal powder comprising at least one of polycrystalline diamond and cubic boron nitride, said bimodal powder comprising fine particles of a substantially uniform size and coarse particles of a substantially uniform size, said coarse particles having a different substantially uniform size than the fine particles of substantially uniform size, wherein abrasive crystals of said abrasive layer have an average aspect ratio of particles greater than about 0.3; and

sintering said abrasive layer with a high pressure high temperature process.

17. The method according to claim 16, further comprising the step of bonding a substrate to said abrasive layer.

18. The method according to claim 16, wherein said abrasive layer having abrasion resistance and impact resistance properties, has a sum value of an impact resistance number and an abrasion resistance number $\geq$ 19,000, wherein the impact resistance number is equal to a total number of hits before failure of the tool insert and the abrasion resistance number is equal to equation (1)

$$\text{(1)}\qquad \text{abrasion resistance} = \frac{\text{final volume of granite removed by the tool insert (inch}^3\text{)}}{\text{final tool wear land area (inch}^2\text{)}}\ .$$

19. The method of claim 16, wherein a volume fraction of fine particles is between about 5% to 90%, and a volume fraction of coarse particles is between about 10% and about 95%.

20. The method of claim 16, wherein an average size ratio of fine particles over coarse particles is about 0.02 to about 0.75.

21. A tool insert having increased abrasion resistance and impact resistance properties, comprising an abrasive layer and a substrate, wherein said abrasive layer is formed from a bimodal powder mixture comprising fine particles of a substantially uniform size and coarse particles of a substantially uniform size, wherein abrasive crystals of the abrasive layer have an average aspect ratio of particles greater than about 0.3.